



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1940
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/047,188	01/15/2002	Brian C. Barnes	2000.056900/TT4089	5070

23720 7590 11/03/2005

WILLIAMS, MORGAN & AMERSON, P.C.
10333 RICHMOND, SUITE 1100
HOUSTON, TX 77042

EXAMINER

SON, LINH L D

ART UNIT PAPER NUMBER

2135

DATE MAILED: 11/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/047,188	BARNES ET AL.	
	Examiner	Art Unit	
	Linh LD Son	2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 January 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is responding to the Amendment received on 08/15/2005.
2. Claims 1-20 are pending.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-7, and 12-16 are rejected under 35 U.S.C. 102(e) as being anticipated by England et al, US Patent No. 6775779B1, hereinafter England.

5. As per claims 1 and 12, England discloses "A method, comprising: executing a software object; establishing a security level for said software object" in (Col 9 lines 42-50 and Col 10 lines 6-20); "performing a multi-table input/output (I/O) space access using at least one of said security levels; and executing said function of said object, wherein executing said function comprising accessing at least at portion of said

input/output space" in (Col 5 line 55 to Col 6 line 45).

As per claim 2, England discloses "The method described in claim 1, wherein executing a software object further comprises using a processor to process software code of said software object" in (Col 8 lines 10-24).

As per claim 3, England discloses "The method described in claim 1, wherein establishing a security level for said software object further comprises assigning a security level relating to a input/output (I/O) space access of at least a portion of a input/output (I/O) space" in (Col 5 lines 55-67).

As per claim 4, England discloses "The method described in claim 1, wherein performing a multi-table input/output (I/O) space access using at least one of said security level further comprises: establishing a secondary table; receiving a input/output (I/O) space access request based upon executing of said software object; performing a multi-level table access based upon said input/output (I/O) space access request using said secondary table and at least one virtual input/output (I/O) space table; and accessing a portion of a input/output (I/O) device based upon said multi-level table access" in (Col 6 lines 33-45).

As per claim 5, England discloses "The method described in claim 4, wherein establishing a secondary table further comprises: dividing a physical input/output (I/O) space into a plurality of segments; determining at least one of said segment to omit from said secondary table and at least one un-omitted segment; assigning a default security level to said omitted segment; assigning a security level to said un-omitted segment; and correlate at least one assigned segment with a virtual input/output (I/O) space

location" in (Col 6 lines 33-45, and lines 46-65).

6. As per claim 6, England discloses "The method described in claim 4, wherein performing a multi-level table access based upon said input/output (I/O) space access request further comprises: determining at least one security level that corresponds to a segment in said secondary table" in (Col 6 lines 33-40); "verifying a match between an execution security level to a security level associated with a segment being accessed in response to an execution of said object" in (Col 6 lines 40-45); "determining a virtual input/output (I/O) space address based upon said secondary table in response to a match between said execution security level and said security level associated with said segment being accessed; and locating a input/output (I/O) device corresponding to said virtual input/output (I/O) space address" in (Col 6 lines 46-65, and Col 10 lines 40-50)

7. As per claim 7 England discloses "The method described in claim 6, wherein determining at least one security level that corresponds to a segment in said secondary table comprises: determining a physical I/O device address from said virtual input/output (I/O) space table" in (Col 10 lines 40-50, and Col 6 lines 55-65); "determining a segment being executed based upon said physical address; and defining a current security level based upon said determining of said segment being executed" in (Col 6 lines 46-65).

Art Unit: 2135

8. As per claims 13-14, England discloses "An apparatus, comprising: a processor coupled to a bus; means for coupling at least one software object to said processor; a input/output (I/O) device unit; and a input/output (I/O) access interface coupled to said bus and said input/output (I/O) space unit" in (Col 4 lines 15-35), "said input/output (I/O) space access interface to provide said processor a multi-level table input/output (I/O) space access of at least a portion of said input/output (I/O) space unit based upon at least one security level, in response to said processor executing said software object" in (Col 5 lines 55-67).

9. As per claim 15, England discloses "The apparatus of claim 13, wherein said input/output (I/O) space access interface comprises a virtual input/output (I/O) space access table coupled with a secondary input/output (I/O) table, said input/output (I/O) space access interface to provide a virtual input/output (I/O) space addressing scheme to access at least one portion of said input/output (I/O) device based upon a security level" in (Col 6 lines 45-65, and Col 10 lines 40-50).

10. As per claim 16, England discloses "The apparatus of claim 13, wherein said input/output (I/O) device comprises at least one of a magnetic tape memory, a flash memory, a random access memory, and a memory residing on a semiconductor chip" in (Col 4 lines 25-35).

Double Patenting

11. The previous nonstatutory double patenting rejection dated 05/13/05 is maintained. See below.

12. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

13. A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

14. Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

15. Claims 1-20 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of

Art Unit: 2135

copending Application No. 09999881, hereinafter '881. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1-20 in this application recites similar feature as the claims 1-20 in the copending Application '881, except the copending Application '881 recites "the multi-table input/output (I/O) space" feature in this application as the "the multi-table memory". Nevertheless, it obvious at the time of the invention was made for one having ordinary skill in the art to interpret the "the multi-table Input/Output space " as the "the multi-table memory". The claimed input/output (I/O) space in this application is referring to the computer readable storage medium, which allows the processor to write or read information from, or input or output information from. The depend claim 16 in both application recites exact similar limitation of the input/output (I/O) space device or memory device.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

16. "A later patent claim is not patentably distinct from an earlier patent claim if the later claim is obvious over, or **anticipated by**, the earlier claim. In re Longi, 759 F.2d at 896, 225 USPQ at 651 (affirming a holding of obviousness-type double patenting because the claims at issue were obvious over claims in four prior art patents); In re Berg, 140 F.3d at 1437, 46 USPQ2d at 1233 (Fed. Cir. 1998) (affirming a holding of obviousness-type double patenting where a patent application claim to a genus is anticipated by a patent claim to a species within that genus). " ELI LILLY AND

COMPANY v BARR LABORATORIES, INC., United States Court of Appeals for the Federal Circuit, ON PETITION FOR REHEARING EN BANC (DECIDED: May 30, 2001).

Response to Arguments

17. As per argument on page 8-9, first paragraph, applicant argues that England does not disclose “the multi-table input/output (I/O) space access using the security levels and executing the function of the object”. Examiner interpreted the Multi-table memory access as the Multi-ring memory access. England discloses a multi-ring memory access system to execute program object. Each ring has designated addresses to read data from or write data to memory or initiate code execution (Col 5 lines 58-60 and Col 6 lines 6-10) and a level of restriction or security. It is clearly that each ring of memory contains addresses of memory that can only be accessed with a certain level of restriction or security. On page 9, middle paragraph, Applicant wrote: “In other words, simply because England discloses a multi-ring security system, the elements relating to the multi-table access of the claims of the present invention are not anticipated”, is understood and recognize by the Office. Nonetheless, the multi-table access manner is referred by England “Multi-ring” access in (Col 5 line 55 to Col 6 line 12). Nonetheless, the elements relating to the multi-table access are not recited in the claim language. By the way, what are the various subject matters?

Therefore, England anticipates claim 1. Claims 2-7 are depending on claim 1 and are rejected under the reasons as above.

18. Claims 12-16 recite similar limitation as claims 1-7 and are rejected under the same reasons as above.
19. For the reasons above, the rejection of claims 1-7 and 12-16 dated 05/06/05 is maintained. However, claims 8-11 and 17-20 rejection under 103 (a) was being unpatentable over England has been withdrawn in view of applicant's arguments.
20. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., page 9, "the elements relating to the multi-table access") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

21. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

Art Unit: 2135

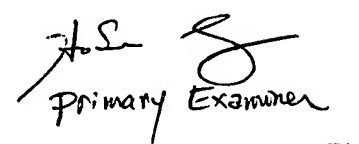
mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Linh LD Son whose telephone number is 571-272-3856. The examiner can normally be reached on 9-6 (M-F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Linh LD Son
Examiner
Art Unit 2135


Primary Examiner
Art Unit 2135